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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

HARRELL, ROBERT B

ART UNIT PAPER NUMBER

2142

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/005,706	Applicant(s) SCHINAZI, STEPHANE	
	Examiner Robert B. Harrell	Art Unit 2142	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 August 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-28 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 November 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☒ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input checked="" type="checkbox"/> Other: <u>see attached Office Action</u> . |

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1. Claims 15-28 are presented for examination.
2. The Foreign Priority Documents have not been filed and the Japanese copies are in error as they belong to another application.
3. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.
4. The textual portion of the specification is replete with grammatical and idiomatic errors to numerous too mention specifically. The specification should be revised carefully. The claims are more directed to -Single Chip Monolithic Integrated Modem With Built In Internet Functionality-.
5. The applicant should use this period for response to thoroughly and very closely proof read and review the whole of the application for correct correlation between reference numerals in the textual portion of the Specification and Drawings along with any minor spelling errors, general typographical errors, accuracy, assurance of proper use for Trademarks TM, and other legal symbols ®, where required, and clarity of meaning in the Specification, Drawings, and specifically the claims (i.e., provide proper antecedent basis for "the" and "said" within each claim). Minor typographical errors could render a Patent unenforceable and so the applicant is strongly encouraged to aid in this endeavor.
6. The following is a quotation of the second and fourth paragraphs of 35 U.S.C 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers.

7. Claims 22, 23, and 26 are rejected under 35 U.S.C 112, second paragraph, and/or 35 U.S.C. 112, fourth paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention and/or further limiting a preceding claim. Specifically, claim 22 should conform to MPEP 608.01(n) (i.e. "of" is lacking between "one" and "Claims"). It cannot be clearly ascertained if claim 26 is independent or dependent form. Claim 23 contains redundant wordage.

8. Prior to addressing the grounds of the rejections below, should this application ever be the subject of public review by third parties not so versed with the technology (i.e., access to IFW through Public PAIR (as found on <http://portal.uspto.gov/external/portal/pair>)), this Office action will usually refer an applicant's attention to relevant and helpful elements, figures, and/or

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text upon which the Office action relies to support the position taken. Thus, the following citations are neither all-inclusive nor all-exclusive in nature *as the whole of the reference is cited* and relied upon in this action as part of the substantial evidence of record. Also, no temporal order was claimed for the acts and/or functions.

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this action:

A person shall be entitled to a patent unless -

(e) the invention was described in — (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for the purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language;

10. **Claims 15-28 are rejected under 35 U.S.C. 102 (e)** as being anticipated by Narasimhan et al. (United States Patent Number: US 6,446,192 B1).

11. The rejection, and grounds for rejection, under 35 U.S.C. 102(e) as presented in examiner's prior Office Action, including citation therein to Narasimhan's figures and text, are hereby maintained and incorporated in this Office Action by reference herein as given below.

12. Per claim 15, Narasimhan taught an electronic component (e.g., see figure 2) for connection to a telecommunications network (e.g., see col. 5 (line 63-et seq. "Internet" and/or "modem" anticipated "telephones" as covered in col. 6 (line 12 "phone lines"))) and data exchange in accordance with at least a part of Internet protocols (e.g., see figure 2 "TCP" and/or "IP" and/or FTP and/or HTTP and/or SMTP exc...), comprising an integrated monolithic component comprising a DSP (Digital Signal processor per col. 6 (line 21)) architecture (e.g., see col. 6 (line 30)) including at least one memory (e.g., see Abstract, figure 2, and figure 12) in which is loaded a program implementing the Internet protocols including routines for message handling (e.g., see figure 2 (SMTP), FTP download (e.g., see figure 2 "FTP")), and/or Web server functionalities (e.g., see figure 2 ("HTTP")), the DSP architecture further comprising a signal processing program for exchange of data on the network (e.g., see figure 12 and col. 6 (lines 47-59)). In short, Narasimhan placed Internet functionality onto a single integrated monolithic processor based modem chip. Web pages contain digital signals (music, voice, movies), thus accessing such pages and processing them was also digital signal processing (DSP).

13. Per claim 16, claim 17, claim 18, claim 19, and claim 20 see col. 6 (lines 9 ("modem" required A/D (analog to digital converters and modems had DSPs), line 12 "phone line" anticipated and/or encompasses POT / switched telephone network or cell phones that had DSP,

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line 13 "radio", such as walky-talkies that had DSPs, all of which where electric networks as was Ethernet of col. 6 (line 47)).

14. Per claim 21, size is a design choice anticipated in col. 6 (lines 14-29).

15. Per claim 22, see figure 2 for IP, TCP, col. 6 (line 47) for PPP and figure 12's buffers (70) for intermediate calculations.

16. Per claim 23, claim 24 and claim 25, Internet had Internet providers and the single integrated monolithic processor based Internet modem chip, covered herein, per col. 3 (line 9-et seq.) and col. 5 (line 46-et seq.) with respect to the several Operating System types as [?] "supervision" [?] supervisory layers for controlling the recited functions and possible receipt of an electronic message ("e-mail" covered in col. 6 (line 52)) with call back login functions using anticipated Internet NAT functions and DHCP per figure 2 (center left) on a computer (by definition a computer was a calculator) encompassed and anticipated by col. 6 (lines 14-29 (i.e., a TI calculator with USB connection)). Internet protocols included within the set VoIP which required DSP and other voice based protocols that required DSPs and thus built into the chip to cover that Internet protocol as expected by Narasimhan who covered all Internet protocols even if only some were specifically mentioned; and, within the set of all Internet protocols were voice based and thus more unique DSP inherently required.

17. Claim 27 and claim 28, these claims do not teach or defined above the correspondingly rejected claims given above, and are thus rejected for the same reasons given above. That is, Narasimhan taught a single integrated monolithic computer processor based modem chip that performed all known Internet function with known Internet protocols for telecommunication equipment such as voice and thus DSP was inherently required or argued present as the chip performed digital signal processing itself.

18. The applicant's 08 August 2005 response argued in substance that Narasimhan is inapplicable to new Claims 15-28, which substantially correspond in many ways to original Claims 1-14. However, as indicated above, Narasimhan is applicable to new Claims 15-28, which substantially correspond in many ways, and differs in some, to original Claims 1-14 and thus the rejection and ground for rejection presented in examiner prior action continues and is hereby incorporated into this FINAL Office Action by reference as further embellished upon above to map word for word on the new claims;

b) one area of particular interest is the claimed integrated monolithic component. Support for that specific language may be found in the applicant's specification in paragraphs (0007) and (0014). In any event, by referring to Fig. 1 of Narasimhan, it can be seen that the DSP, which is mentioned in column 6 at line 21 of Narasimhan, is an example of the specified device control circuitry 38 that can be connected to the network interface chip 36. However, is an extra DSP in the system controlled by the modem chip of col. 6 (line 30) indicating his modem was a single integrated circuit for processing digital signals and thus was a digital signal processor chip, or contained digital signal processing per figure 12. DSPs where known to be interfaced to other DSPs and within modems. Thus, there are two DSPs, one in the chip and outside of the chip. In

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any event, the Internet modem chip was a Digital Signal Processing chip since it processed digital signals such as voice per col. 6 (line 1-et seq.). Note is taken to line 13 of col. 6 since walky-talkies contained DSPs, cell phones were radios that also contained DSPs. Nonetheless, integrating all of figure 1B (36 and 38) onto one chip was anticipated. Finally, chip 36 of figure 1B was a modem per col. 11 (lines 10-14) and modem contained, or could contain, DSPs and thus the chip having a DSP was anticipated and expected.

19. The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this office action:

a) a patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

20. Claims 15-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Narasimhan et al. (United States Patent Number: US 6,446,192 B1).

21. The above mapping/citations for rejecting the claims under 35 U.S.C. 102(e) continue and are hereby incorporated into this rejection, under 35 U.S.C. 103(a), by reference. However, it would have been obvious to those skilled in the data processing art to integrate the whole of the circuitries of figure 1B into a single integrated monolithic chip because such was reduce chip count, pin I/O, and size for the same reasons Personal Computers do not take up the area of a 10 story buildings or several city blocks. Furthermore, it would have been obvious to incorporate the network interface chip into such devices as a radio based cell phone per in col. 6 (line 1-et seq.) and thus clearly obvious to integrate the whole of all circuitry onto on a single chip for a single board within the cell phone. That is, per figure 1B, the device 34 being a cell phone could have all of its circuitry 38 and/plus network interface 36 placed/built onto one single monolithic integrated circuit chip because such would reduce chip count, pin I/O, and overall size. Integrating known circuitries is not novel and does not comprise a step towards an invention.

22. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

23. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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24. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert B. Harrell whose telephone number is (571) 272-3895. The examiner can normally be reached Monday thru Friday from 5:30 am to 2:00 pm and on weekends from 6:00 am to 12 noon Eastern Standard Time.

25. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew T. Caldwell, can be reached on (571) 272-3868. The fax phone number for all papers is (703) 872-9306.

26. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-9600.

A handwritten signature in black ink, appearing to read 'R. B. Harrell', with a long horizontal flourish extending to the right.

ROBERT B. HARRELL
PRIMARY EXAMINER
GROUP 2142